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U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

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## SILICON IN FEBRUARY 1997

Domestic shipments of silicon ferroalloys and metal in **February**, excluding silvery pig iron, decreased by about 9% compared with shipments in January, according to the U.S. Geological Survey. Overall production of silicon alloys and metal decreased by about 8%.

**January** trade data are included in this report. Trade data for

February were unavailable at the time of publication and will be included in a subsequent report.

Published prices for silicon-based commodities are listed below (**Source: Platt's Metals Week**). Ferrosilicon prices are based on the contained weight of silicon. All prices are posted in cents per pound.

### Dealer Import Prices

	<u>50% Ferrosilicon</u>	<u>75% Ferrosilicon</u>	<u>Silicon Metal</u>
February 7	53.0-56.0	48.0-50.0	85.0-88.5
February 14	"	47.8-49.8	"
February 21	"	"	"
February 28	"	"	"

TABLE 1  
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL 1/ 2/

(Metric tons)

Material	Gross production 3/		Net shipments		Stocks
	February 1997	Year to date	February 1997	Year to date	February 1997
Silvery pig iron:					
Less than 25% silicon	W	W	W	W	W
Ferrosilicon:					
25-55% silicon	11,200	26,600	9,510	20,400	19,100
56-95% silicon	14,400	26,000	12,700	24,500	19,200
Silicon metal:					
Excludes semiconductor grades	14,400	30,200	13,700	29,900	5,680
Miscellaneous silicon alloys:					
Exclusive of silicomanganese	8,270	17,800	7,200	15,900	13,000

W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits.

2/ Includes U.S. Geological Survey estimates.

3/ Ferrosilicon production includes material consumed in the production of miscellaneous silicon alloys.

TABLE 2  
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JANUARY 1997 1/ 2/

(Metric tons)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
Over 55% silicon:						
Australia	16	11	\$27,000	16	11	\$27,000
Brazil	54	32	72,900	54	32	72,900
Canada	740	444	601,000	740	444	601,000
Mexico	186	117	171,000	186	117	171,000
Total	996	604	872,000	996	604	872,000
Other ferrosilicon:						
Australia	152	76	157,000	152	76	157,000
Canada	797	399	606,000	797	399	606,000
China	61	30	156,000	61	30	156,000
India	40	20	58,300	40	20	58,300
Japan	449	225	355,000	449	225	355,000
Korea, Republic of	313	156	247,000	313	156	247,000
Mexico	339	170	291,000	339	170	291,000
Taiwan	120	60	136,000	120	60	136,000
Thailand	49	25	39,000	49	25	39,000
United Kingdom	2,230	1,120	1,380,000	2,230	1,120	1,380,000
Other (1 country)	20	10	15,300	20	10	15,300
Total	4,570	2,290	3,440,000	4,570	2,290	3,440,000
Total ferrosilicon	5,570	2,890	4,310,000	5,570	2,890	4,310,000
Metal:						
Over 99.99% silicon:						
Czech Republic	4	4	247,000	4	4	247,000
Denmark	4	4	330,000	4	4	330,000
Finland	4	4	185,000	4	4	185,000
Germany	3	3	212,000	3	3	212,000
Japan	177	177	10,900,000	177	177	10,900,000
Korea, Republic of	34	34	1,590,000	34	34	1,590,000
Malaysia	8	8	2,090,000	8	8	2,090,000
Netherlands	27	27	464,000	27	27	464,000
Poland	2	2	110,000	2	2	110,000
Taiwan	10	10	367,000	10	10	367,000
Other (12 countries)	6	6	852,000	6	6	852,000
Total	280	280	17,300,000	280	280	17,300,000
99.00 - 99.99% silicon:						
Brazil	7	7	21,500	7	7	21,500
Korea, Republic of	77	77	228,000	77	77	228,000
Mexico	20	20	29,900	20	20	29,900
Total	105	104	279,000	105	104	279,000
Other silicon:						
Canada	352	342	356,000	352	342	356,000
France	15	15	19,800	15	15	19,800
Germany	4	4	4,990	4	4	4,990
Hong Kong	3	3	6,550	3	3	6,550
Indonesia	(3/)	(3/)	2,950	(3/)	(3/)	2,950
Japan	150	146	591,000	150	146	591,000
Mexico	158	154	279,000	158	154	279,000
Taiwan	67	65	88,000	67	65	88,000
United Kingdom	8	8	10,800	8	8	10,800
Total	757	735	1,360,000	757	735	1,360,000
Total silicon metal	1,140	1,120	18,900,000	1,140	1,120	18,900,000

1/ Monthly data are based on the year to date quantities (gross weight) of the top ten countries.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than ½ unit.

Source: Bureau of the Census.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JANUARY 1997 1/ 2/

(Metric tons)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55 - 80% silicon, over 3% Ca:	--	--	--	--	--	--
55 - 80% silicon, Other:						
Argentina	2,890	2,160	\$2,330,000	2,890	2,160	\$2,330,000
Brazil	105	79	91,400	105	79	91,400
Canada	321	246	330,000	321	246	330,000
Egypt	2,120	1,460	1,740,000	2,120	1,470	1,740,000
Germany	45	34	251,000	45	34	251,000
Iceland	2,400	1,830	1,930,000	2,400	1,830	1,930,000
Norway	3,720	2,770	3,380,000	3,720	2,770	3,380,000
Poland	1,380	1,030	1,070,000	1,380	1,030	1,070,000
Romania	1,440	1,080	1,040,000	1,440	1,080	1,040,000
South Africa	1,270	961	1,010,000	1,270	961	1,010,000
Other ( 2 countries)	27	19	38,100	27	19	38,100
Total	15,700	11,700	13,200,000	15,700	11,700	13,200,000
80 - 90% ferrosilicon:						
Argentina	495	403	458,000	495	403	458,000
Over 90% ferrosilicon:	--	--	--	--	--	--
Magnesium ferrosilicon:						
Brazil	571	270	522,000	571	270	522,000
Canada	77	36	97,200	77	36	97,200
Germany	4	2	15,400	4	2	15,400
Norway	235	103	310,000	235	103	310,000
Total	887	411	944,000	887	411	944,000
Other ferrosilicon:						
Canada	691	229	578,000	691	229	578,000
Poland	1,680	802	823,000	1,680	802	823,000
Total	2,370	1,030	1,400,000	2,370	1,030	1,400,000
Total ferrosilicon	19,500	13,500	16,000,000	19,500	13,500	16,000,000
Metal:						
Over 99.99% silicon:						
Australia	80	80	144,000	80	80	144,000
Belize	1	1	1,970	1	1	1,970
China	1	1	222,000	1	1	222,000
Germany	49	49	3,900,000	49	49	3,900,000
Italy	23	23	1,300,000	23	23	1,300,000
Japan	16	16	836,000	16	16	836,000
Kyrgyzstan	1	1	102,000	1	1	102,000
Russia	5	5	540,000	5	5	540,000
Ukraine	1	1	119,000	1	1	119,000
United Kingdom	1	1	43,100	1	1	43,100
Other ( 4 countries)	(3/)	(3/)	29,700	(3/)	(3/)	29,700
Total	179	179	7,240,000	179	179	7,240,000
99.00 - 99.99% silicon:						
Australia	420	416	685,000	420	416	685,000
Brazil	1,500	1,490	2,610,000	1,500	1,490	2,610,000
Canada	1,990	1,980	1,840,000	1,990	1,980	1,840,000
China	2	2	4,670	2	2	4,670
France	173	172	300,000	173	172	300,000
India	420	416	668,000	420	416	668,000
Japan	2	2	21,000	2	2	21,000
Norway	100	99	194,000	100	99	194,000
Sweden	4	3	24,000	4	3	24,000
Total	4,610	4,580	6,350,000	4,610	4,580	6,350,000

See footnotes at end of table.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JANUARY 1997 1/ 2/

(Metric tons)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal--Continued:						
Other silicon:						
Australia	160	157	\$263,000	160	157	\$263,000
Canada	53	52	89,700	53	52	89,700
China	97	96	110,000	97	96	110,000
India	397	392	595,000	397	392	595,000
Norway 4/	123	88	191,000	123	88	191,000
Romania	76	73	118,000	76	73	118,000
Russia	507	487	635,000	507	487	635,000
South Africa	343	331	500,000	343	331	500,000
Spain	99	97	159,000	99	97	159,000
United Kingdom	76	74	143,000	76	74	143,000
Other ( 3 countries)	13	12	26,500	13	12	26,500
Total	1,940	1,860	2,830,000	1,940	1,860	2,830,000
Total silicon metal	6,740	6,610	16,400,000	6,740	6,610	16,400,000

1/ Monthly data are based on the year to date quantities (gross weight) of the top ten countries.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than ½ unit.

4/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.